3682

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Herbert Gropp et al.
Serial No: 09/476,521 Filing Date: January 3, 2000
Title: BUILT-UP CAMSHAFT
Examiner: Vinh T. Luong Art Unit: 3682

February 12, 2003 Attorney's Docket No. RUM212

TRANSMITTAL LETTER

Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231

SIR:
Transmitted herewith for filing is:
<X> SUBMISSION TO THE INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR § 1.97.
dated February 12, 2003 (10 pages)

(X) The applicant hereby petitions the Commissioner of Patents and Trademarks to extend the time for response to any Office Action outstanding in the above captioned matter as necessary to avoid abandonment of the application. Please charge my deposit account No.11-0224 in the amount required to cover the cost of the extension. Any deficiency or overpayment should be charged or credited to the above account.

(X) The Commissioner is hereby authorized to charge any fees under 35 U.S.C. 1.16, and 1.17, after a mailing of a Notice of Allowance under 35 USC 1.18 or any additional fees which may be required during the entire pendency of the application, or credit any overpayment, to Acct. No.11-0224. A duplicate copy of this sheet is enclosed. If and only if account funds should be insufficient, immediately contact our associate, Lisa Zumwalt, at (703)415-0579, who will pay immediately to avoid deprivation of rights.

( ) Please charge my Deposit Account No.11-0224 in the amount of $_____. A duplicate copy of this sheet is enclosed.

A signature or signatures required for the above recited document(s) is (are) provided herebelow. Such signature(s) also provide(s) ratification for any required signature appearing to be defective in the above recited document(s).

Robert J. Ferb, 13 Forest Drive, Warren, N.J.07059
Reg. No. 29,536, Tel.(908)757-2839

Mailing Certification: I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents and Trademarks, Washington, D.C. 20231, on

20 FEB 2003

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#27/IDS Statement 3-7-03

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February 12, 2003 Attorney's Docket No. RUM212S3

SUBMISSION TO THE INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR § 1.97.

Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231

SIR:

Applicants have filed an information disclosure statement on July 3, 2000.

The regulations in 37 CFR 1.98(3) require that applicants must provide a concise explanation of the relevance, as it is presently understood by the individual most knowledgeable about the content of the information, of each patent, publication, or other information listed that is not in the English language.

1.Germany; Eine neue Generation von Pressverbindungen fuer hohe dynamische Belastungen; Publication of Technische Universitaet Chemnitz-Zwickau; 7pages, edited by H. Gropp and D. Klose.

The reference states on page 1 under "Herstellung":

" according to a simple, energy-saving chemical method a nonmetallic inorganic compound stable conversion layer with the thickness of about five

micrometers to 10 micrometers is applied to the compression face of the shaft or of the hub, but not onto both compression faces."
Claim one of the present application requires `a pipe coated by a jointing coating on an outer cylindrical surface `.

Since the reference teaches applying a conversion layer to a compression face of a shaft and since claim one refers to a pipe coated by a jointing coating on an outer cylindrical surface, it is believed that the reference would be of interest to a person investigating patentability of claim one of the present application.

2. Germany; Belastbarkeit und Lebensdauer von Pressverbindungen mit phosphatierten Passflaechen; IfL-Mitt, 22 (1983) Heft 6;
5 pages by Gunter Pursche and Herbert Gropp.
The article refers on page 227, second column, line 7, to the language " in the usual case the fitting surface of the shaft is coated. In principle however also the coating of the fitting surface of the hub is possible. It is essential that only the fitting surface of one part to be coated, since in a case of coating of the two fitting surfaces the intended effects cannot be accomplished.

Claim nine of the instant application requires: " a pipe coated with a crystalline phosphate coating on an outer cylindrical surface and having an outer diameter".

Since claim nine refers to a pipe coated with a crystalline phosphate coating and since the reference refers to coating of a fitting surface, it is believed that this reference is relevant to patentability of the instant application.

3. Germany; Eine neue Generation von pressverbindungen zur uebertragung Hoher Dynamischer Lasten; Deutscher Verband fuer Materialforschung und pruefung e.V.; 12 pages, by H.Gropp, D. Klose, D. Cottin, J. Scharrer.

The reference states on page 144, beginning line 30: " the compression face of shaft or hub is furnished with a compound stable conversion layer, wherein the conversion layer is a special inorganic -- nonmetallic layer formed as a fine crystalline phosphate layer on the basis of Phosphorsal P 150. These phosphate layers are compound stable, have no or only a slight tendency to adhere and have a thickness of about five micrometers.

Claim one requires " transformed as rings with an outer cylindrical flange and in a cylindrical flange and provided with the jointing coating on an inner cylindrical surface of the inner cylindrical flange".

Since the reference provides a conversion layer on a compression face of a shaft or a half and since the claim one requires a jointing coating on an inner cylindrical surface, it is believed that the reference is properly recited in this information disclosure statement.

4. Germany; Neuartige Pressverbindungen fuer hoechste Belastungen; antriebstechnik 38 (1999) Nr 7; 4 pages, by Herbert Gropp.

The reference states on page 64, column 2, beginning with line 4 quotes the compression face of the shaft or of the hub of a press connection, however not both, are furnished with an inorganic-nonmetallic protection layer of a fine crystalline phosphate layer having a thickness of about five micrometers and based on modified Phosphorsal P 150."

Claim 16 of the present communication requires in line eight that the parts to be connected are provided with a suitable surface coating.

Since the reference teaches an inorganic-nonmetallic protection layer to be furnished and since claim 16 requires the parts to be connected to be provided with a suitable surface coating, it appears that this reference is relevant in connection with patentability of claim 16 of the instant application.

5. Germany; Das Verhalten von Pressverbindungen mit phosphatierten Passflaechen unter Oeleinwirkung; Maschinenbautechnik, Berlin 37 (1988); 3 pages, by K. Waechter to, W. Mombrei and H. Gropp.
The reference is entitled " the behavior of press connections with phosphated fitting faces under the operation of oil."
The reference states on page 443, first column, under the heading "Einleitung" in the first sentence:" Press connections were developed in the year 1980 for the transfer of high dynamic loads, wherein the fitting faces of the shafts or hubs are furnished with a phosphate layer on the basis of Phosphorsal 150, reference [1] = G. Pursche, H. Gropp, and H. Latsch, shaft hub connection, in particular compression connection with coated

fitting surfaces, German Democratic Republic economic patent (inventors certificate) 152, 972 of September 11, 1980)".

Claim one of the present application requires that a pipe is coated by a jointing coating.

As the reference refers to fitting faces of shafts or hubs being furnished with a phosphate layer and where claim requires that a pipe be coated by a jointing coating, it appears that this reference is of interest in connection with the prosecution of the instant application.

6. Germany; Pressverbindungen fuer hohe dynamische Belastungen; maschinenbautechnik, Berlin 37 (1988), 2 pages, by H. Gropp .
The reference states in column 2, under point 3.1., in the first sentence:
" The fitting faces of the shaft or of the hub are furnished with a compound stable, in organic -- nonmetallic conversion layer on the basis of Phosphorsal P 150 in these compression connections, wherein the conversion layer does not exhibit any or only a very slight tendency to adhere.

Claim 9 of the instant application requires " a pipe coated with a crystalline phosphate coating on an outer cylindrical surface".

Since the reference refers to a shaft furnished with a conversion layer and since claim nine requires a pipe coated with a crystalline phosphate coating, this reference appears to the of interest to a person investigating patentability of claim nine of the instant application.

7. Germany; Erhoehung der Sicherheit gebauter Nockenwellen durch Einsatz beschichteter Pressverbindungen; MTZ Motortechnische Zeitschrift 57 (1996); 8 pages, by Klaus Seim, Herbert Gropp, and Peter Tenberge.

The reference states on page 288, third column, last paragraph: " phosphate protective layers, which up to now have been applied only in the surface protection technology, are employed for the first time as transfer elements in compression connections with compound stable conversion layers [17]. According to a simple energy-saving chemical process, a layer of about five micrometers of a fine crystalline phosphate is applied to the compression face of shaft or hub."

Claim nine requires a pipe coated with a crystalline phosphate coating.

Since the reference refers to phosphate protective layers and since claim 9 requires a pipe coated with crystalline phosphate coating, this reference should be considered in connection with the prosecution of the instant patent application.

8. Germany; Zur Anwendung beschichteter Pressverbindungen; agrartechnik, Berlin 35 (1985) 4; 5 pages, toby G. P toursche, tóH. G toropp, toand Brigitte Rost .

The reference states on page 171, second column, first paragraph, last two sentences: " for this purpose it is required to change correspondingly the state of the boundary space shaft -- hub (fitting faces). This is accomplished by applying over compound stable inorganic -- nonmetallic conversion layer onto the fitting face of shaft or hub."

Claim 9 of the instant application requires " pipe coated with a crystalline phosphate coating on an outer cylindrical surface".

Since the reference refers to an inorganic -- nonmetallic conversion layer and since claim 9 requires a pipe coated with a crystalline phosphate coating, it is deemed that this reference is proper recited in connection with information disclosure.

9. Germany; Eine neue Generation von Pressverbindungen mit beschichteten Pressflaechen zur Uebertragugn hoechster statischer und dynamischer Belastungen; VDI Berichte;
8 pages, by H. Gropp.

The reference states on page 245, second paragraph: " an inorganic -- nonmetallic compound stable conversion layer in the form of a fine crystalline phosphate layer having a thickness of about five micrometers to 10 micrometers and based on modified Phosphorsal P 150 is applied to the compression face of the shaft or of a half of a press connection, however not to both, according to a simple, energy-saving chemical method.

Claim 9 of the present application requires a pipe coated with crystalline phosphate coating on an outer cylindrical surface.

Since the reference refers to a fine crystalline phosphate layer and since claim nine refers to a crystalline phosphate coating on an outer cylindrical

surface, it appears that this reference is of interest in the investigation of patentability of claim 9.

10. Germany; Patentschrift 0152972; Wellen-naben Verbindung, Insbesondere Pressverbindung mit Beschichteten Passflaechen;
5 pages to G. Pursche, H. Gropp, H. Laetsch.

Claim 1 of the reference reads as follows:
" 1. Shaft hub connection, in particular compression connections with coated fitting faces, characterized in that the fitting faces of a shaft -- hub -- connection are furnished with a chemical connection of the base material with nonmetallic -- inorganic layers."
Claim 16 of the instant application requires in line 8, that the parts to be connected are provided with a suitable surface coating.

Since the reference teaches a chemical connection of the base material with the nonmetallic -- inorganic layers and since claim 16 of the instant application requires that the parts to be connected use a suitable surface coating, it is believed that the reference is of interest in determining patentability of claim 16 of the instant application.

11.Technische Universitaet Chemnitz-Zwickau, Wartungsfrei und umweltfreundlich, new generation of compression connections, Hanover fair 1996.

The second paragraph of the reference states: " the following effects are accomplished by applying of a fine crystalline, inorganic -- nonmetallic, compound stable conversion layer on one of the two compression faces."

Claim 16 of the instant application requires in line 8 that the parts to be connected are providing the suitable surface coating.

Since the reference mentions a compound stable conversion layer and since claim 16 employs a suitable surface coating, it is believed that the preferences of interest in connection with patentability of claim 16.

12. The German printed patent document DE 19640872 A1 to C. Duerlich to et al. teaches a cam for a built cam shaft. The document refers to a German patent application files on Oct. 4, 1996 and published on April 16, 1998. It is believed that the publication date is later than the application date of the parent application of the instant application.

The German printed patent document teaches in column 2, lines 17 and 18: " the cam is disposed on the carrying shaft which is here the pipe 1 according to figure 1."

Claim 16 of the instant application states in lines 6 to 8 that the cams (3), the end pieces (6), the bearing rings, and the other parts are connected by means of longitudinal compression joints to the pipe.

As the reference refers to a cam exposed on the carrying shaft and claim 16 refers to cams (3) connected by means of longitudinal compression joints to

the pipe, it appears that the contents of the reference is of interest in connection with patentability of claim 16.

The above recited references taken alone or in combination are believed neither to anticipate or to render obvious the present application.

Consideration of the reference document during the examination of the present application is respectfully requested.

Respectfully submitted,

Herbert Gropp et al.

By: _____

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